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APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/724,109	10/724,109 12/01/2003		Arkady Glukhovsky	P-5453-US	8741	
49443	7590	01/23/2006		EXAMINER		
PEARL CO		•	SMITH, PHILIP ROBERT			
10 ROCKEF SUITE 1001		LAZA	ART UNIT	PAPER NUMBER		
NEW YORK	K, NY 1	0020	3739			
				DATE MAILED: 01/23/2006	5	

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Арр	licant(s)					
		10/724,109	GLU	JKHOVSKY	ET AL.				
	Office Action Summary	Examiner	Art	Unit					
		Philip R. Smith	373	9					
Period fo	The MAILING DATE of this communication app or Reply	ears on the cover shee	et with the corres	pondence	address				
THE - Exte after - If the - If NC - Failu Any earn	ORTENED STATUTORY PERIOD FOR REPLY MAILING DATE OF THIS COMMUNICATION. Insions of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. It period for reply specified above is less than thirty (30) days, a reply opened for reply is specified above, the maximum statutory period we re to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing end patent term adjustment. See 37 CFR 1.704(b).	i6(a). In no event, however, ma within the statutory minimum o fill apply and will expire SIX (6) cause the application to becom	ay a reply be timely file of thirty (30) days will be MONTHS from the ma ne ABANDONED (35)	d e considered tim iling date of this U.S.C. § 133).	communication.				
Status					•				
1)⊠	Responsive to communication(s) filed on 28 No	ovember 2005.	•						
2a)⊠	This action is <b>FINAL</b> . 2b) This	action is non-final.	;						
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the meri								
	closed in accordance with the practice under E	x parte Quayle, 1935	C.D. 11, 453 O:	G. 213.	. •				
Dispositi	on of Claims								
4)[[]	Claim(s) <u>1-33,35-40 and 44-47</u> is/are pending i	n the application							
-	4a) Of the above claim(s) <u>1-33</u> is/are withdrawn	• •							
	Claim(s) is/are allowed.			;					
· <u> </u>	Claim(s) <u>35-40 and 44-47</u> is/are rejected.			:					
	Claim(s) is/are objected to.				•				
-	Claim(s) are subject to restriction and/or	election requirement.			. •				
Applicati	on Papers		:						
- 11	The specification is objected to by the Examiner	:	;	•					
• —	The drawing(s) filed on is/are: a) acce		I to by the Exam	iner					
	Applicant may not request that any objection to the o	· ·	•	:					
	Replacement drawing sheet(s) including the correcti		-		CFR 1.121(d).				
11)	The oath or declaration is objected to by the Ex			:	, ,				
D.1	105110.0.0.440								
	ınder 35 U.S.C. § 119		:	:					
	Acknowledgment is made of a claim for foreign	priority under 35 U.S.	C. § 119(a)-(d) (	or (f).					
a)	☐ All b)☐ Some * c)☐ None of:		·.						
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•	2. Certified copies of the priority documents		• • • • • • • • • • • • • • • • • • • •		- 1. 🕶				
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	e of Draftsperson's Patent Drawing Review (PTO-948)	Paper	No(s)/Mail Date	<u></u> `.					
	nation Disclosure Statement(s) (PTO-1449 or PTO/SB/08)		of Informal Patent A	Application (P	TO-152)				
rape	r No(s)/Mail Date	6) L Other:	<del></del> -						

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#### **DETAILED ACTION**

### Specification

[01] The title has been amended as follows to overcome the objection in the Office action of 3/24/2005: "Method and apparatus for transmitting non-image information via an image sensor in an in vivo imaging system."

## Claim Rejections - 35 U.S.C. 112, Paragraph Two

- [02] The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
- [03] Claims 41-43, which were rejected in the Office action of 6/28/2005 for being indefinite, have been cancelled, rendering moot the previous rejection.
- [04] Claims 37, 40 & 46-47 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
- [05] Claim 47 recites an "imager" where "image sensor" is clearly intended. There is insufficient antecedent basis for this limitation in the claim.
- [06] Claim 45 recites that "non-image sensor information" is "convert[ed]" to "the output of an illumination source." Claim 46 recites the "display" of "non-image sensor information." This is indefinite because the "non-image sensor information" has been converted to "the output of an illumination source." By its nature, non-image sensor information must have optical characteristics in order to be imaged; thus the conversion recited by claim 45 is a prerequisite of display. Claim 46 will be

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interpreted "...a display to display non-image sensor information the output of the illumination source."

- [07] Similarly, claim 47 recites the "process[ing] of the non-image sensor information imaged by imager." As noted above, conversion of "non-image sensor information" is a prerequisite if imaging. Claim 47 will be interpreted "a processor to process the non-image sensor information the output of the illumination source imaged by the [image sensor]."
- [08] Claim 44 recites that "non-image sensor information" is "convert[ed]" to "the output of an illumination source." Claim 37 recites that "non-image sensor information" is "direct[ed]" via an "optical guide" to an "image sensor." Claim 37 will be interpreted "...directing the non-image sensor information the output of the illumination source to a specified location on the image sensor via an optical guide."
- [09] Claim 40 recites the "display" of "non-image sensor information." This is indefinite because the "non-image sensor information" has been converted to "the output of an illumination source." Claim 40 will be interpreted "...displaying the interpreted non-image sensor information the output of the illumination source."

## Claim Rejections - 35 USC § 102

- [10] The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
- [11] The independent claim 34 has been cancelled and replaced by new independent

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claims 44 & 45. The Meron and Takayama references used in the Office action of 6/28/2005 have been overcome as stipulated in the Examiner Interview of 9/15/2005.

- [12] Claims 35-39 & 44-45 are rejected under 35 U.S.C. 102(b) as being anticipated by Iddan et al (6,428,469).
- [13] With regard to claim 45: Iddan discloses an in vivo imaging system comprising a non-image sensor to obtain non-image information ("unit 14" comprising "axial motion detector 22," "switch driver 20" and "switch 18," 3/1-11) and a container (autonomous capsule 10," 2/50) enclosing:
  - [13a] an illumination source ("light emitter 26," 3/12-19);
  - [13b] an illumination driver circuit ("power distributor 16," 3/1-11) to convert the non-image sensor information to output of the illumination source ("controls the supply to [the light emitter]," 3/11); and
  - [13c] an imager-("camera assembly 25," 3/12-19) to image at least the output of the illumination source.
- [14] With regard to claim 44: Iddan thus establishes a method of transmitting in vivo non-image information, the method comprising:
  - [14a] obtaining non-image sensor information from a sensor (axial acceleration, 3/1-11);
  - [14b] converting the non-image sensor information to the output of an illumination source ("re-activate the imaging unit," 3/37-41), the illumination source

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contained within a container;

- [14c] relaying the output of the illumination source to an area on an image sensor (via the imaged object), the image sensor contained within the container; &
- [14d] transmitting the image sensor information to an external receiver (via "radio transmitter 27," 3/1-11).
- [15] With regard to claim 35: The "radio transmitter 27" disclosed by Iddan is conventionally used for transmitting image data collected by the image sensor to an external device, where it is analyzed and displayed.
- [16] With regard to claim 36: The non-image sensor information collection disclosed by Iddan may be obtained from the gastrointestinal tract.
- [17] With regard to claim 37: Iddan shows a "window 40" which guides the output of the illumination source to a specified area on the image sensor.
- [18] With regard to claim 38: The "power distributor 16" disclosed by Iddan is inherently capable of electrically connecting the illumination source ("26") to the non-image sensor ("14").
- [19] With regard to claim 39: The non-image information obtained is interpreted by the "switch driver 20" composing "unit 14."
- [20] With regard to claims 40 & 46: The inherent purpose of the "video capsule" (title) disclosed by Iddan is to display the in vivo images captured by the device.
- [21] With regard to claim 47: The "radio transmitter 27" disclosed by Iddan process the

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output of the illumination source imaged by the image sensor.

#### **Response to Arguments**

[22] Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

#### Conclusion

- [23] Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).
- [24] A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.
- [25] Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip R. Smith whose telephone number is (571) 272 6087 and whose email address is philip.smith@uspto.gov. The examiner can

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normally be reached between 9:00am and 5:00pm.

- [26] If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda Dvorak can be reached on (571) 272 4764.
- [27] Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

[28] prs

John P Loubecker Primary Examiner